

We claim:

1. An arrangement of a stored set of accessories of a tow truck, comprising:

5 a telescopic boom;

a tow bar assembly having a pair of oblique extender arms, namely a right extender arm and a left extender arm, said extender arms connected at a tow bar and defining a recess; therebetween;

10 a wheel lift assembly having a rearwardly extending probe arm supporting a transverse cross bar having a pair of rotatable, laterally movable wheel lifting scoops;

said tow truck comprising a deck having a second recess and a distal end, said second recess extending inward from said
15 distal end of said deck substantially at the midpoint of said distal end of said deck;

said second recess having a right edge and a left edge;

said right extender arm non-removably rotatably attached adjacent to an upper portion of said right edge of said second
20 recess and said left extender arm non-removably rotatably attached adjacent to an upper portion of said left edge of said second recess.

2. The arrangement as in claim 1, wherein said telescopic
25 boom comprises three stages.

3. The arrangement as in claim 1 wherein said second recess comprises a substantially V-shaped recess;

30 4. The arrangement as in claim 1, wherein said second recess comprises a substantially truncated V-shaped recess.

5. The arrangement as in claim 1 further comprising a third recess extending downward through a portion of said deck, wherein
35 a portion of said probe arm of said wheel lift assembly lies within said third recess.

6. An arrangement of a stored set of accessories of a tow truck, comprising:

a telescopic boom;

5 a tow bar assembly having a pair of oblique extender arms, namely a right extender arm and a left extender arm, said extender arms connected at a tow bar joint and defining a first recess therebetween;

10 a wheel-lift assembly, a portion of said wheel-lift assembly situated within said recess;

said tow truck comprising a deck having a second recess and a distal end, said second recess extending inward from said distal end of said deck substantially at the midpoint of said distal end of said deck;

15 said second recess having a right edge and a left edge;

said right extender arm non-removably rotatably attached adjacent to an upper portion of said right edge of said second recess and said left extender arm non-removably rotatably attached adjacent to an upper portion of said left edge of said
20 second recess.

7. The arrangement as in claim 1, wherein said deck further comprises a tow bar holding portion, said holding portion comprising a slanted ramp and locking means, said tow bar
25 removably lockable with said holding portion for storing said tow bar.

8. The arrangement as in claim 5, wherein said probe arm of said wheel lift assembly includes a first portion of said probe
30 arm extending into said first recess, a second portion of said probe arm extending into said second recess and a third portion of said probe arm extending into said third recess.

9. An arrangement as in claim 6, wherein said wheel-lifting
35 assembly further comprises a top surface being the uppermost portion of said wheel-lifting assembly, as in said arrangement,

and said towing truck comprises a rear window having a top edge and an opposing bottom edge, the height of said top surface of said wheel-lifting assembly being lower than the height of said bottom surface of said rear window for improved visibility, and
5 said second recess of said deck being wide enough and low enough to provide a view from said rear window of said wheel lift assembly at respective tires of a disabled vehicle.

10 10. A method of lifting one end of a four-wheeled vehicle by a tow truck, comprising a plurality of steps, controlled by a user operating a remotely controlled means, said steps comprising:

i) lowering an end of a wheel-lifting assembly adjacent to an end of said vehicle to be lifted, said end of said wheel-lifting assembly having a cross bar, said cross bar having a pair
15 of slider arms extending outwardly from said end of said wheel-lifting assembly;

ii) telescoping said wheel-lifting assembly outward, each said slider arm comprising a claw pivotally mounted at one end of
20 said slider arm using at least one hydraulic cylinder for alignment with the wheels of said vehicle to be towed;

iii) advancing each said slider arm toward adjacent wheels of said vehicle to be towed;

iv) pivoting said claws of said slider arms to rotatably
25 align with the wheels of said vehicle to be towed using a mechanical pivoting means;

v) terminating advancement of said slider arms, under the condition of each said slider arm contacting a wheel of said vehicle to be towed;

30 vi) using at least one hydraulic cylinder, retracting said slider arms until said claws make contact with sides of said adjacent wheels opposite the sides contacted by said slider arms; and

vii) raising said wheel-lifting assembly to lift one end of
35 said vehicle to be towed.

11. The method of lifting one end of a four-wheeled vehicle as in claim 10, wherein said remote controlled means comprises a function panel and a coil cable, operable by a user located outside of a towing truck.

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12. The method of lifting one end of a four-wheeled vehicle as in claim 10, the user located within the cab of a towing truck, said remote controlled means comprising a function panel located within the cab of said towing truck.

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13. The method of lifting one end of a four-wheeled vehicle as in Claim 10, said user operating said function panel adjacent to said deck, wherein a clearance is provided between a vertical axis of said user and the plane of movement of said cross bar of said wheel lift assembly.

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14. An arrangement of a stored set of accessories of a tow truck, comprising:

a telescopic boom; said telescopic boom having a recess extending between said telescopic boom and a deck of said tow truck,

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a tow bar assembly having a pair of oblique extender arms, namely a right extender arm and a left extender arm, said extender arms connected at a tow bar and defining a recess;

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a wheel lift assembly;
said recess of said deck of said tow truck extending inward from said distal end of said deck substantially at the midpoint of said distal end of said deck;

said second recess having a right edge and a left edge;

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said right extender arm non-removably rotatably attached adjacent to an upper portion of said right edge of said second recess and said left extender arm non-removably rotatably attached adjacent to an upper portion of said left edge of said second recess;

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said recess of said deck being partly occupied by said wheel lift probe arm in both its storage and deployed positions;

respective proximal ends of said extender arms of said tow bar assembly being hinged adjacent said recess of said deck toward the rear of said recess;

5 said tow bar assembly having said tow bar at its distal end being stored by folding said tow bar assembly forward over said recess of said deck;

 said recess of said tow bar assembly providing clearance required by said wheel lift probe arm in its folded storage position; and,

10 said recess under said telescoping boom providing storage space for both said folded tow bar assembly and said wheel lift assembly when said tow bar assembly and said wheel lift assembly are not in use.